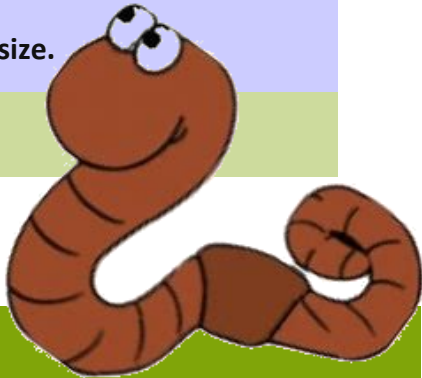


Compost Troubleshooting chart

Problem	Cause	Solution
Pile is too Wet.	Too much moisture.	Add browns to soak up excess moisture.
Pile too dry.	Not enough moisture	Add moist greens and/or water using a watering can or hose with shower head.
Pile smells like ammonia	Too much nitrogen	Add coarse browns. (leaves, sawdust)
Pile smells like Rotten eggs	Not enough air or too much moisture	Turn or fluff pile and incorporate course browns.
Pile just smells!	Greens not covered	Incorporate greens into browns
Pile isn't heating up/ decomposing slowly	Lack of Nitrogen.	Incorporate greens
	Not enough air.	Turn/fluff pile.
	Cold weather.	Insulate with straw or a tarp to warm.
	Not enough moisture.	Add greens and/or water.
Nothing is happening	Pile too small.	Add more organics to increase size.
	Lack of nitrogen	Add greens, Turn pile



How to Use Compost

- ★ Once your compost is finished, you can add it to soils anytime of year without fear of burning plants.
- ★ An easy way to incorporate compost is to use it as top-dressing, or mulch.
- ★ Use compost when potting indoor plants. It will allow the soil to retain nutrients.
- ★ **FUN FACT!** Compost can hold 200% of its dry weight in water, so it's great for potted plants and gardens!
- ★ **FUN WORM FACTS!** Worms can live for up to 15 years, and they have been on this earth for 120 million years. Every grain of healthy soil capable of growing food has already gone through a worm!

To Contact Us

CITY OF FREDERICKSBURG  
PUBLIC WORKS DEPARTMENT  
715 PRINCESS ANNE ST  
FREDERICKSBURG, VA 22401  
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Visit us on the web at:  
<https://www.fredericksburgva.gov>



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ONSITE COMPOSTING

A How To Guide for Citizens City of Fredericksburg Public Works Department

What is Composting & Why Do It?

Composting is a natural process that turns organic materials into a nutrient rich soil amendment that can be used in gardens and flowerbeds. It can be done on any scale, including on-site at your home. This method is usually most environmentally sustainable and carries the smallest carbon footprint.

Benefits of composting include:

- Reducing the amount of waste that ends up in landfills.
- Potential for reduction in bulk trash costs.
- Provides free, organic fertilizer for lawns, gardens, trees and flower beds.
- Creates awareness of food waste and other compostable materials.

Tips for Getting Started

Decide what you want to compost.

Knowing what you want to include in your compost pile will help in choosing the correct containers. Common items to include are: vegetable and fruit wastes, grass clippings, garden items such as spent flowers or leaves from harvested veggies, coffee grounds, tea bags, even shredded paper.

Choose your compost container.

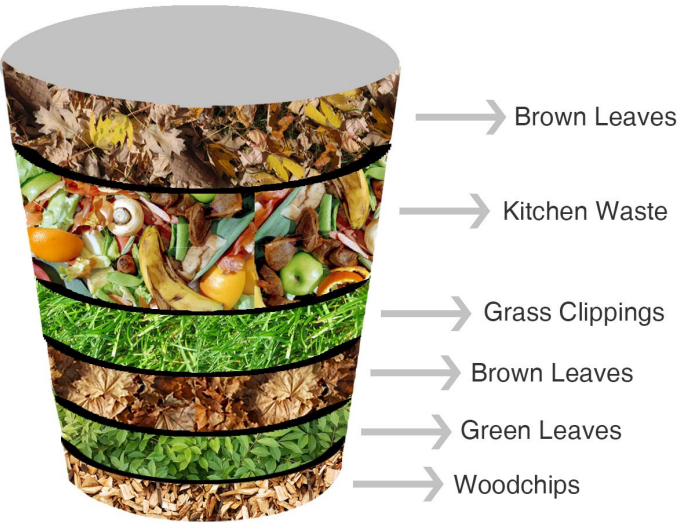
There are many options regarding what sort of container you use. You can build your own or purchase one that is ready to go. Ready made composters are sufficient for small amounts of compostables, but if you are thinking of composting grass clippings and leaves, you may want to consider constructing a bin or two. There are many good plans online for building bins. A small container for gathering materials inside is also handy.

Pick a Location.

This area should be easy to access in all seasons, have protection from the wind to keep the compost from drying out, and adequate sun exposure to speed up the composting process. Depending on the type of composter you choose, keep the views of passers by and neighbors in mind when siting your operation. Leave space around your containers for air flow and potential extra compostables, such as grass clippings and leaves that may accumulate at times. Also keep in mind how far you are willing to carry materials from the kitchen. Closer to the house might be welcome on a rainy or cold day.

What Can I Compost?

Two types of organic materials are needed for a successful compost program, GREENS and BROWNS. Layering these materials will help your compost “work” faster. Green materials provide nitrogen to the mixture, and brown materials provide carbons. For microorganisms to survive, a compost system must also have adequate moisture and air. Odorless composting means you have the right amount of oxygen. Experimentation will make you an expert in no time!



Take a look at the chart inside for good GREENS and BROWNS. Correctly layering compost helps it to decompose more thoroughly.

*“I find that a real gardener is not a man who cultivates flowers; he is a man who cultivates the soil.”*

Karel Capek



# COMPOSTING 101

## Greens (Nitrogen)

- Food scraps
- Vegetable scraps
- Fruit wastes
- Coffee grounds
- Tea bags/leaves
- Fresh grass clippings
- Other garden waste (plants, stalks, flowers)
- Chicken/livestock manure
- Corn husks
- Stale/moldy bread



## Browns (Carbon)

- Leaves
- Shredded straw, hay
- Sawdust
- Woody chips & twigs
- Shredded newspaper
- Nut shells
- Corn stalks and cobs
- Brown paper bags
- TP & paper towel rolls
- Crushed eggshells
- Cereal boxes
- Ashes from wood
- String/cotton thread
- Wool



Carbon/Nitrogen ratio  
is important  
for compost  
to form properly.

A good ratio  
to keep in mind is

**3 BROWN:1 GREEN**



## Prohibited Items

- Meat
- Fish
- Poultry
- Bones
- Milk products
- Oil
- Pet manures
- Weed seeds
- Diseased/insect infested plants
- Glossy paper
- Anything with harsh chemicals



## Troubleshooting

**Ideal N:C Ratio = 2:1**

(brown material volume is packed)

**Too much Nitrogen = Smelly Compost**

**Too much Carbon = Won't break down**

Adequate air  
Adequate moisture  
Roll bin around twice a week  
Bury food scraps into can for pest control

## What else do I need to compost?

**Turning tools.** Depending on the type of bin you choose, you may need to turn your pile from time to time. A small pitchfork or narrow shovel would work well.

Hose/Close by water source.

Buckets/wheelbarrow to move finished compost.

*That's it!*



Kitchen containers  
can be as simple as a  
plastic coffee container or a  
fancier specialty container.

A dedicated  
container for  
collecting kitchen  
scraps can be kept  
under the sink or on  
the counter,  
depending on how  
often you empty it.



DIY Backyard Compost Options are numerous!

## How Big?

Size your composter  
based on the amount  
of browns and greens  
you think you will be  
providing to the pile,  
and willing to maintain.

Consider a larger bin if  
you have lots of leaves  
and/or grass clippings.

You can build your own  
bin(s) or purchase  
them ready made.

## LINKS FOR ASSISTANCE

Links for building own bins.

<https://www.wikihow.com/Build-a-Tumbling-Composter>

<https://learn.eartheasy.com/guides/how-to-build-a-compost-bin/>

<https://compostguide.com/18-cool-diy-compost-bin-designs/>

How to fix my compost problems. Troubleshooting.

<https://www.planetnatural.com/composting-101/making/problems/>

Winter composting.

<https://www.familyhandyman.com/garden/winter-composting-101/view-all/>

Backyard Composting. (University of Maryland)

[https://extension.umd.edu/sites/extension.umd.edu/files/images/programs/hgic/Publications/HG35\\_Backyard\\_Composting.pdf](https://extension.umd.edu/sites/extension.umd.edu/files/images/programs/hgic/Publications/HG35_Backyard_Composting.pdf)

EPA Composting at Home.

<https://www.epa.gov/recycle/composting-home>

Composting Activities for Kids.

<https://ecommons.cornell.edu/bitstream/handle/1813/11729/Composting%20Wastes%20to%20Resources.pdf?sequence=1&isAllowed=y>

Worm Composting.

<http://homecompostingmadeeasy.com/wormcomposting.html>

Planning to Reduce Food Wastes.

<https://www.epa.gov/recycle/reducing-wasted-food-home>



Tumbler composters reduce the work needed to mix decomposing materials